

# Weekly report (2013.6.3~6.9)

## Done

- 1) I tried comparing my preprocessing method that base on triangle facet to Hu's pixel-based method. I used to think that my method is better with no doubt, but it's proved to be wrong by the experiment (some of the results are shown in Figure 1).

I conclude that the two methods suit different situations, facet-based method better suits simple scenes (much more pixels than facets), while pixel-based method suits for complex ones.

Figure 1 Preprocessing (save all pixels)

Scene	triangle number	pixel based	triangle based
boeing	328891506	35min	73min
5% boeing	16444576	2min05s	2min08s
museum	1604502	25min	6min

- 2) Do experiment to find out suitable segment size for the web service. When it's done locally, there is no much difference (Figure 2), but when tested remotely (i.e. network speed is much slower), smaller size seems better (Figure 3).

Figure 2 在本地对 town 场景的测试

浏览器分辨率	缓存	分片大小	数据量	平均响应时间
1920*968 (sumsung SyncMaster S22B310)	无	256*256	171.4M	0.88s
		512*512	192.3M	0.68s
	有	256*256	171.4M	0.47s
		512*512	192.3M	0.30s
1366*643 (aspire s5)	无	256*256	115.3M	0.64s
		512*512	155.6M	0.66s
	有	256*256	115.3M	0.42s
		512*512	155.6M	0.43s

Figure 3 在外网通过 rvpn 对 town 场景的测试

浏览器分辨率	缓存	分片大小	数据量	平均响应时间
1366*643 (aspire s5)	无	256*256	115.3M	4.85s
		512*512	155.6M	7.23s
	有	256*256	115.3M	4.34s
		512*512	155.6M	6.49s

## To Do

- 1) For each scene I used, find out which method suits better, and try to draw a more general conclusion.